

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	21446	anthracene	US-PGPUB; USPAT	OR	ON	2006/08/14 15:39
L2	9629	anthracene and synthesis	US-PGPUB; USPAT	OR	ON	2006/08/14 15:39
L3	9287	anthracene and making	US-PGPUB; USPAT	OR	ON	2006/08/14 15:39
L4	11283	anthracene and make	US-PGPUB; USPAT	OR	ON	2006/08/14 15:39
L5	673162	anthracene and ammonium salt	US-PGPUB; USPAT	OR	ON	2006/08/14 15:40
L6	8525	anthracene and ammonium and salt	US-PGPUB; USPAT	OR	ON	2006/08/14 15:40
L7	4223	anthracene and ammonium and salt and making	US-PGPUB; USPAT	OR	ON	2006/08/14 15:40
L8	464	I7 and alkylating	US-PGPUB; USPAT	OR	ON	2006/08/14 15:40
L9	410	I7 and alkylating and ether	US-PGPUB; USPAT	OR	ON	2006/08/14 15:40
L10	76	I7 and alkylating and ether and phosphonium	US-PGPUB; USPAT	OR	ON	2006/08/14 15:41
L11	0	anthracenediol and I10	US-PGPUB; USPAT	OR	ON	2006/08/14 15:42
L12	36	anthracenediol	US-PGPUB; USPAT	OR	ON	2006/08/14 15:42
L13	0	I10 and I12	US-PGPUB; USPAT	OR	ON	2006/08/14 15:42
L14	671835	I12 and ammonium salt	US-PGPUB; USPAT	OR	ON	2006/08/14 15:42
L15	6	I12 and ammonium ADJ salt	US-PGPUB; USPAT	OR	ON	2006/08/14 15:43
S1	1	"6696112".pn.	US-PGPUB; USPAT	OR	ON	2006/08/14 12:06
S2	5	"539807".ap.	US-PGPUB; USPAT	OR	ON	2006/08/14 15:38

10/539,807 8-14-2006 Yung Chu

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FULL ESTIMATED COST

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ENTRY | TOTAL
SESSION |
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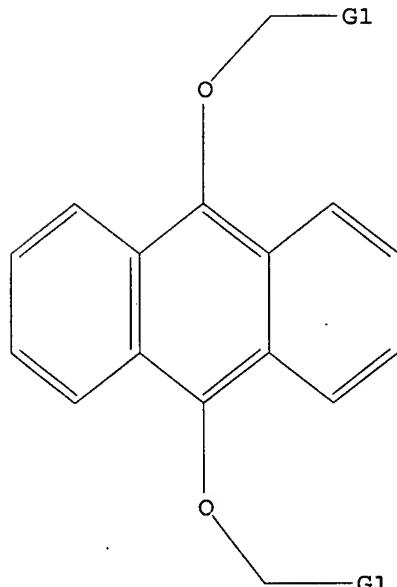
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L1 STRUCTURE UPLOADED

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L1 HAS NO ANSWERS
L1 STR



G1 Ak,Cb

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=> s 11
SAMPLE SEARCH INITIATED 08:29:15 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED -

739 TO ITERATE

100.0% PROCESSED 739 ITERATIONS
SEARCH TIME: 00.00.01

25 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 13150 TO 16410
PROJECTED ANSWERS: 200 TO 800

L2 25 SEA SSS SAM L1

=> s 11 full
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FULL SCREEN SEARCH COMPLETED - 15657 TO ITERATE

100.0% PROCESSED 15657 ITERATIONS 454 ANSWERS
SEARCH TIME: 00.00.01

L3 454 SEA SSS FUL L1

=> file caplus
COST IN U.S. DOLLARS SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST 167.38 167.59

FILE 'CAPLUS' ENTERED AT 08:30:07 ON 14 AUG 2006
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=> s 13
L4 366 L3

=> s 14 and quaternary ammonium
127577 QUATERNARY
339 QUATERNARIES
127720 QUATERNARY
(QUATERNARY OR QUATERNARIES)
370638 AMMONIUM
402 AMMONIUMS
370782 AMMONIUM
(AMMONIUM OR AMMONIUMS)
63227 QUATERNARY AMMONIUM
(QUATERNARY (W) AMMONIUM)

L5

3 L4 AND QUATERNARY AMMONIUM

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L5 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:271685 CAPLUS

DOCUMENT NUMBER: 138:287414

TITLE: Preparation of hydroquinone alkyl ethers - Not OP same

INVENTOR(S): Kubo, Hideo; Yamaguchi, Katsuji; Shirai, Akihiro Assignee

PATENT ASSIGNEE(S): Nippon Soda Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE | |
|------------------------|------|----------|-----------------|----------|-----------|
| JP 2003104926 | A2 | 20030409 | JP 2001-299629 | 20010928 | (D2(a)) |
| PRIORITY APPLN. INFO.: | | | JP 2001-299629 | 20010928 | not D2(e) |

OTHER SOURCE(S): CASREACT 138:287414

AB Title compds., useful as sensitizers for photopolymn., etc. (no data), are prep'd. by alkylation of hydroquinones by C.gtoreq.3 alkylating agents in the presence of bases and quaternary ammonium salts having C.gtoreq.5 substituents on N. Anthraquinone was alkylated by BuI in THF/H₂O in the presence of trioctylmethylammonium chloride, Na₂S₂O₄, and NaOH at 40-50.degree. for 5 h to give 85% 9,10-dibutoxyanthracene. US filij-

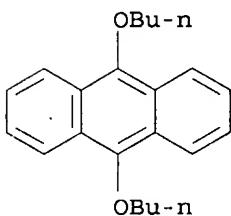
IT 76275-14-4P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(prepn. of hydroquinone alkyl ethers from hydroquinones using quaternary ammonium salts)

RN 76275-14-4 CAPLUS

CN Anthracene, 9,10-dibutoxy- (9CI) (CA INDEX NAME)



L5 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:271684 CAPLUS

DOCUMENT NUMBER: 138:287413

TITLE: Preparation of anthracene diethers

INVENTOR(S): Nakano, Hironori; Honda, Hiroyuki; Numata, Shigeaki

PATENT ASSIGNEE(S): Kawasaki Kasei Chemicals, Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

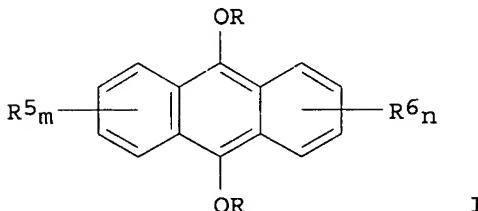
Current Application

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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| JP 2003104925 | A2 | 20030409 | JP 2001-299128 | 20010928 |

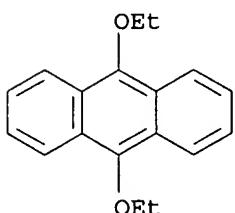
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| CA 2510270 | AA 20040708 | CA 2002-2510270 | 20021219 |
| WO 2004056734 | A1 20040708 | WO 2002-JP13314 | 20021219 |
| WO 2004056734 | C1 20050804 | | |
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| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| AU 2002357616 | A1 20040714 | AU 2002-357616 | 20021219 |
| EP 1574493 | A1 20050914 | EP 2002-808287 | 20021219 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK | | | |
| US 2006079721 | A1 20060413 | US 2005-539807 | 20050620 |
| PRIORITY APPLN. INFO.: | | JP 2001-299128 | A 20010928 |
| | | WO 2002-JP13314 | W 20021219 |

OTHER SOURCE(S): MARPAT 138:287413

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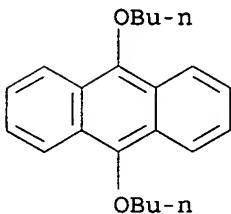


- AB Anthracene diethers I. (R = alkyl, allyl, aryl, benzyl, hydroxyalkyl, alkoxyalkyl; R5, R6 = inert group; m, n = 0-4), useful as sensitizers for photocurable compns. (no data), are prep'd. by reaction of 9,10-anthracenediols with etherifying agents in aq. media contg. alkalies and quaternary ammonium or phosphonium compds.
9,10-Anthracenediol Na salt was etherified with BuBr in H₂O/MEK in the presence of Bu₄NBr at 70.degree. for 4 h to give 90% 9,10-dibutoxyanthracene.
- IT 68818-86-0P, 9,10-Diethoxyanthracene 76275-14-4P
479412-73-2P
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(prep'n. of anthracene diethers from anthracenediols using quaternary ammonium or phosphonium compds.)
- RN 68818-86-0 CAPLUS
- CN Anthracene, 9,10-diethoxy- (6CI, 9CI) (CA INDEX NAME)



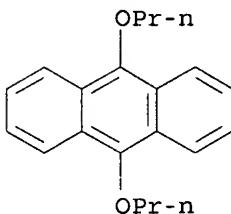
RN 76275-14-4 CAPLUS

CN Anthracene, 9,10-dibutoxy- (9CI) (CA INDEX NAME)



RN 479412-73-2 CAPLUS

CN Anthracene, 9,10-dipropoxy- (9CI) (CA INDEX NAME)



for all one close
art

Composition

L5 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1987:59428 CAPLUS

DOCUMENT NUMBER: 106:59428

TITLE: Liquid crystal compositions

INVENTOR(S): Horimoto, Hikari; Mizutani, Yukio; Ogata, Takayuki

PATENT ASSIGNEE(S): Tokuyama Soda Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------|------|----------|-----------------|----------|
| JP 61136584 | A2 | 19860624 | JP 1984-257349 | 19841207 |
| JP 03080833 | B4 | 19911226 | | |

PRIORITY APPLN. INFO.:

AB The claimed liq. crystal-like compns. contain (1) a quaternary ammonium compd. having .gtoreq.2 linear hydrophobic groups or .gtoreq.1 hydrophobic group contg. stiff part within the chain and (2) a phosphoric group-contg. compd. having .gtoreq.2 linear hydrophobic groups. The liq. crystal-like compns. give membranes which show good water resistance and liq. crystal characteristics. The compns. are useful in prep. synthetic biomembranes, display devices, and membranes for various sensors. Thus, a di(n-octadecyl)dimethylammonium bromide soln. and a di(n-dodecyl)monohydrogen phosphate soln. were mixed to give white ppt. which showed small solv. in water and showed liq. crystal phase at 56-115.

IT 106347-17-5

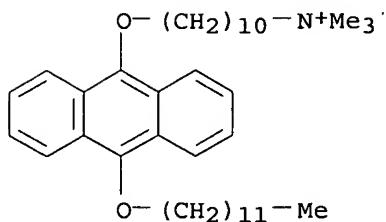
RL: PRP (Properties)

(preprns. of, as liq. crystal compds.)

RN 106347-17-5 CAPLUS

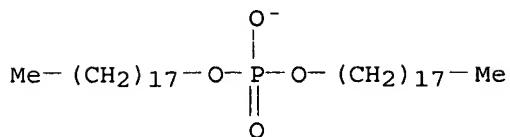
CN 1-Decanaminium, 10-[(10-(dodecyloxy)-9-anthracyl]oxy]-N,N,N-trimethyl-, dioctadecyl phosphate (9CI) (CA INDEX NAME)

CRN 106347-16-4
CMF C39 H62 N O2



CM 2

CRN 84841-00-9
CMF C36 H74 O4 P



=> s 14 and quaternary phosphonium
127577 QUATERNARY
339 QUATERNARIES
127720 QUATERNARY
(QUATERNARY OR QUATERNARIES)
15919 PHOSPHONIUM
80 PHOSPHONIUMS
15942 PHOSPHONIUM
(PHOSPHONIUM OR PHOSPHONIUMS)
12116 QUATERNARY PHOSPHONIUM
(QUATERNARY (W) PHOSPHONIUM)
L6 0 L4 AND QUATERNARY PHOSPHONIUM

=> s 14 and phase transfer
1690902 PHASE
353345 PHASES
1839674 PHASE
(PHASE OR PHASES)
781065 TRANSFER
25566 TRANSFERS
793479 TRANSFER
(TRANSFER OR TRANSFERS)
14182 PHASE TRANSFER
(PHASE (W) TRANSFER)
L7 1 L4 AND PHASE TRANSFER

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L7 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:271685 CAPLUS
DOCUMENT NUMBER: 138:287414
TITLE: Preparation of hydroquinone alkyl ethers
INVENTOR(S): Kubo, Hideo; Yamaguchi, Katsuji; Shirai, Akihiro

PATENT ASSIGNEE(S): Nippon Soda Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

duplicate 1/3

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
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| PRIORITY APPLN. INFO.: | | | JP 2001-299629 | 20010928 |

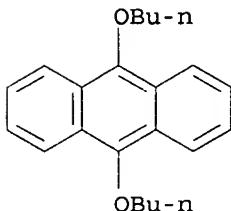
OTHER SOURCE(S): CASREACT 138:287414

AB Title compds., useful as sensitizers for photopolymn., etc. (no data), are prep'd. by alkylation of hydroquinones by C.gtoreq.3 alkylating agents in the presence of bases and quaternary ammonium salts having C.gtoreq.5 substituents on N. Anthraquinone was alkylated by BuI in THF/H₂O in the presence of trioctylmethylammonium chloride, Na₂S₂O₄, and NaOH at 40-50.degree. for 5 h to give 85% 9,10-dibutoxyanthracene.

IT 76275-14-4P
 RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
 (prep'n. of hydroquinone alkyl ethers from hydroquinones using quaternary ammonium salts)

RN 76275-14-4 CAPLUS

CN Anthracene, 9,10-dibutoxy- (9CI) (CA INDEX NAME)



=> s 14 and quaternary salt
 127577 QUATERNARY
 339 QUATERNARIES
 127720 QUATERNARY
 (QUATERNARY OR QUATERNARIES)
 771808 SALT
 597517 SALTS
 1148926 SALT
 (SALT OR SALTS)
 6851 QUATERNARY SALT
 (QUATERNARY(W) SALT)

L8 0 L4 AND QUATERNARY SALT

=> s 14 and etherifying agent
 1025 ETHERIFYING
 793909 AGENT
 1154928 AGENTS
 1624410 AGENT
 (AGENT OR AGENTS)
 316 ETHERIFYING AGENT
 (ETHERIFYING(W) AGENT)

L9 1 L4 AND ETHERIFYING AGENT

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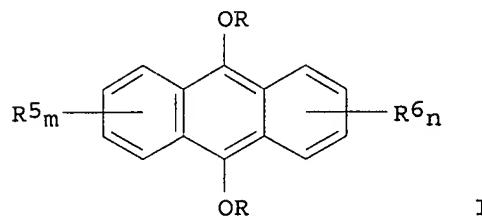
L9 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2003:271684 CAPLUS
 DOCUMENT NUMBER: 138:287413
 TITLE: Preparation of anthracene diethers
 INVENTOR(S): Nakano, Hironori; Honda, Hiroyuki; Numata, Shigeaki
 PATENT ASSIGNEE(S): Kawasaki Kasei Chemicals, Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

Current application

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|---|----------|-----------------|------------|
| JP 2003104925 | A2 | 20030409 | JP 2001-299128 | 20010928 |
| CA 2510270 | AA | 20040708 | CA 2002-2510270 | 20021219 |
| WO 2004056734 | A1 | 20040708 | WO 2002-JP13314 | 20021219 |
| WO 2004056734 | C1 | 20050804 | | |
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| | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| AU 2002357616 | A1 | 20040714 | AU 2002-357616 | 20021219 |
| EP 1574493 | A1 | 20050914 | EP 2002-808287 | 20021219 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK | | | |
| US 2006079721 | A1 | 20060413 | US 2005-539807 | 20050620 |
| PRIORITY APPLN. INFO.: | | | JP 2001-299128 | A 20010928 |
| | | | WO 2002-JP13314 | W 20021219 |

OTHER SOURCE(S): MARPAT 138:287413

GI



AB Anthracene diethers I (R = alkyl, allyl, aryl, benzyl, hydroxyalkyl, alkoxyalkyl; R5, R6 = inert group; m, n = 0-4), useful as sensitizers for photocurable compns. (no data), are prep'd. by reaction of 9,10-anthracenediols with etherifying agents in aq. media contg. alkalies and quaternary ammonium or phosphonium compds. 9,10-Anthracenediol Na salt was etherified with BuBr in H2O/MEK in the presence of Bu4NBr at 70.degree. for 4 h to give 90% 9,10-dibutoxyanthracene.

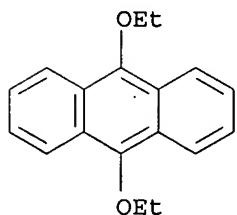
IT 68818-86-0P, 9,10-Diethoxyanthracene 76275-14-4P
 479412-73-2P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(prep. of anthracene diethers from anthracenediols using quaternary ammonium or phosphonium compds.)

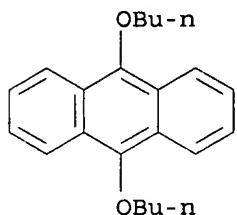
RN 68818-86-0 CAPLUS

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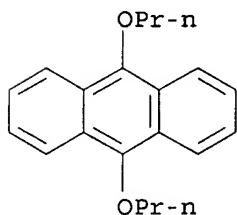
RN 76275-14-4 CAPLUS

CN Anthracene, 9,10-dibutoxy- (9CI) (CA INDEX NAME)



RN 479412-73-2 CAPLUS

CN Anthracene, 9,10-dipropoxy- (9CI) (CA INDEX NAME)



=> s 14 and phosphonium

15919 PHOSPHONIUM

80 PHOSPHONIUMS

15942 PHOSPHONIUM

(PHOSPHONIUM OR PHOSPHONIUMS)

L10 3 L4 AND PHOSPHONIUM

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L10 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:116518 CAPLUS

DOCUMENT NUMBER: 142:200135

TITLE: UV-curable coating compositions for food or soft drink cans or bottles and their coated products

INVENTOR(S): Nakajima, Yoshimoto

PATENT ASSIGNEE(S): Toyo Ink Mfg. Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 28 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

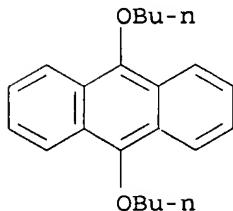
JP 2005036152 A2 20050210 JP 2003-276500 20030718
JP 2003-276500 20030718

PRIORITY APPLN. INFO.: MARPAT 142:200135

OTHER SOURCE(S): AB Title compns. contain (A) photo cationic polymn. initiators selected from iodonium, sulfonium, sulfoxonium, and/or phosphonium salts, (B) 9,10-dialkoxyanthracenes (with C1-8 alkoxy groups substituted at 9 and 10 positions and C1-4 alkyl-substituted or unsubstituted 1-4 and 5-8 positions) as photo sensitizers, (C) room temp. solid epoxy compds. (contg. Me-substituted phenol, epichlorohydrin, and HCHO units), (D) alicyclic epoxy group-contg. cationic polymn. compds., and (E) pigments at A/(A + B + C + D + E) of 1.5-4.0% and C/(A + B + C + D + E) of 1-10%, and preferably E/(A + B + C + D + E) of .gtoreq.40% for TiO₂ and .gtoreq.10% for Al pigment. A Sn-plated steel and PET laminate was coated with a white compn. contg. CyraCure UVI 6990 3, 9,10-dibutoxyanthracene 0.3, YDCN 704 5, CyraCure UVR 6110 41.70, and TiO₂ 50 parts and UV-cured at 40-70% relative humidity over 10-30 s to form a hard film with excellent adhesion.

IT 76275-14-4
RL: CAT (Catalyst use); USES (Uses)
(photosensitizer; UV-curable alicyclic epoxy coatings contg. onium cationic initiators and anthracene photo sensitizers for food cans or bottles)

RN 76275-14-4 CAPLUS
CN Anthracene, 9,10-dibutoxy- (9CI) (CA INDEX NAME)



L10 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:271684 CAPLUS *duplicate*
DOCUMENT NUMBER: 138:287413
TITLE: Preparation of anthracene diethers
INVENTOR(S): Nakano, Hironori; Honda, Hiroyuki; Numata, Shigeaki
PATENT ASSIGNEE(S): Kawasaki Kasei Chemicals, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

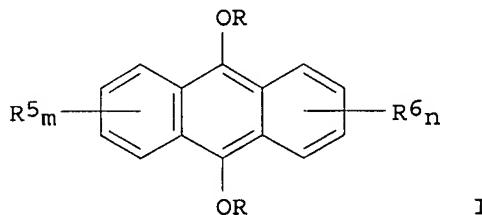
PATENT NO. KIND DATE APPLICATION NO. DATE

JP 2003104925 A2 20030409 JP 2001-299128 20010928
CA 2510270 AA 20040708 CA 2002-2510270 20021219
WO 2004056734 A1 20040708 WO 2002-JP13314 20021219
WO 2004056734 C1 20050804

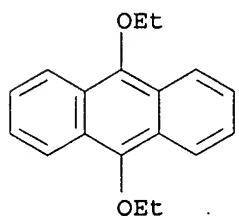
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CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
 GM, HR, HU, ID, IL, IN, IS, KE, KG, KR, KZ, LC, LK, LR, LS, LT,
 LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT,
 RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG,
 US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
 FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SI, SK, TR, BF, BJ, CF,
 CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
 AU 2002357616 A1 20040714 AU 2002-357616 20021219
 EP 1574493 A1 20050914 EP 2002-808287 20021219
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
 US 2006079721 A1 20060413 US 2005-539807 20050620
 PRIORITY APPLN. INFO.: JP 2001-299128 A 20010928
 WO 2002-JP13314 W 20021219

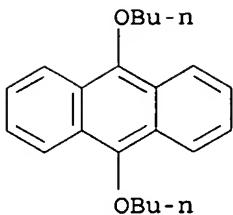
OTHER SOURCE(S): MARPAT 138:287413
GI



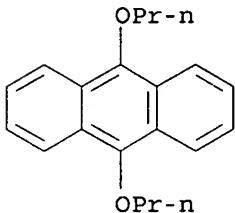
- AB Anthracene diethers I (R = alkyl, allyl, aryl, benzyl, hydroxyalkyl, alkoxyalkyl; R5, R6 = inert group; m, n = 0-4), useful as sensitizers for photocurable compns: (no data), are prep'd. by reaction of 9,10-anthracenediols with etherifying agents in aq. media contg. alkalies and quaternary ammonium or phosphonium compds.
 9,10-Anthracenediol Na salt was etherified with BuBr in H₂O/MEK in the presence of Bu₄NBr at 70.degree. for 4 h to give 90% 9,10-dibutoxyanthracene.
- IT 68818-86-0P, 9,10-Diethoxyanthracene 76275-14-4P
 479412-73-2P
 RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
 (prep'n. of anthracene diethers from anthracenediols using quaternary ammonium or phosphonium compds.)
- RN 68818-86-0 CAPPLUS
 CN Anthracene, 9,10-diethoxy- (6CI, 9CI) (CA INDEX NAME)



RN 76275-14-4 CAPPLUS
 CN Anthracene, 9,10-dibutoxy- (9CI) (CA INDEX NAME)

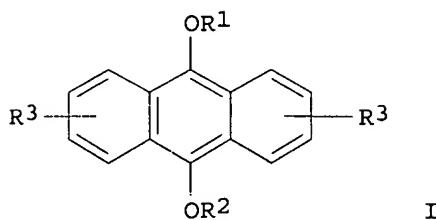


RN 479412-73-2 CAPLUS
 CN Anthracene, 9,10-dipropoxy- (9CI) (CA INDEX NAME)



L10 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2000:503506 CAPLUS
 DOCUMENT NUMBER: 133:136808
 TITLE: Radiation-curable compositions and manufacture of coatings therefrom
 INVENTOR(S): Maruyama, Tsutomu
 PATENT ASSIGNEE(S): Kansai Paint Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--------|------------|-----------------|------------------|
| JP 2000204284 | A2 | 20000725 | JP 1999-8726 | 19990118 |
| PRIORITY APPLN. INFO.: | | | JP 1999-8726 | 19990118 |
| OTHER SOURCE(S): | MARPAT | 133:136808 | | <i>Not relat</i> |
| GI | | | | <i>Many</i> |



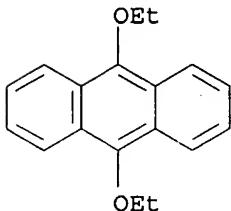
AB The compns. contain (A) photosensitizers I (R1, R2 = C1-8-alkyl; R3 = H, C1-4-alkyl) 0.01-5, (B) photo-cation initiators selected from iodonium salts, sulfonium salts, and phosphonium salts 0.1-20, and (C) cationically photopolymerizable compds. 100 parts. Thus, a compn. contg. 9,10-diethoxyanthracene 1, bis(4-tert-butylphenyl)iodonium hexafluorophosphate (BBI 102) 1, and 3,4-epoxycyclohexylmethyl

3,4-epoxycyclohexanecarboxylate (UVR 6110) 100 parts was applied on a substrate and radiation-cured to give a coating, showing spectral sensitivity 205-450 nm, gel fraction 87%, and pencil hardness 3-4 H.

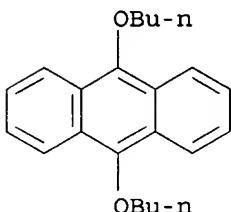
IT 68818-86-0, 9,10-Diethoxyanthracene 76275-14-4
 205515-07-7, 2-Ethyl-9,10-diethoxyanthracene 205515-11-3
 , 2-Methyl-9,10-diethoxyanthracene
 RL: CAT (Catalyst use); USES (Uses)
 (photosensitizer; radiation-curable coating compns. with good
 curability and hardness)

RN 68818-86-0 CAPLUS

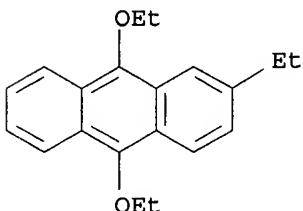
CN Anthracene, 9,10-diethoxy- (6CI, 9CI) (CA INDEX NAME)



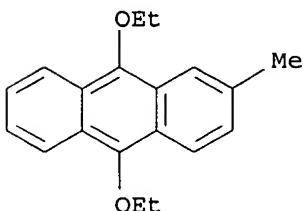
RN 76275-14-4 CAPLUS
 CN Anthracene, 9,10-dibutoxy- (9CI) (CA INDEX NAME)



RN 205515-07-7 CAPLUS
 CN Anthracene, 9,10-diethoxy-2-ethyl- (9CI) (CA INDEX NAME)



RN 205515-11-3 CAPLUS
 CN Anthracene, 9,10-diethoxy-2-methyl- (9CI) (CA INDEX NAME)



=> s 14 and ammonium salt
 10 AMONIUM
 771808 SALT
 597517 SALTS
 1148926 SALT
 (SALT OR SALTS)
 2 AMONIUM SALT
 (AMONIUM(W) SALT)
 L11 0 L4 AND AMONIUM SALT

=> s 14 and ammonium
 370638 AMMONIUM
 402 AMMONIUMS
 370782 AMMONIUM
 (AMMONIUM OR AMMONIUMS)
 L12 9 L4 AND AMMONIUM

=> d ibib abs hitstr tot

L12 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2005:1310229 CAPLUS
 DOCUMENT NUMBER: 144:57628
 TITLE: Photocurable dental composition
 INVENTOR(S): Frances, Jean-Marc
 PATENT ASSIGNEE(S): Fr.
 SOURCE: U.S. Pat. Appl. Publ., 30 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

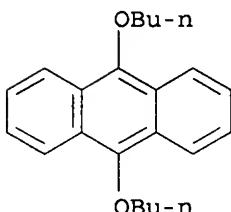
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| US 2005277705 | A1 | 20051215 | US 2005-125133 | 20050510 |
| FR 2872409 | A1 | 20060106 | FR 2004-7210 | 20040630 |
| WO 2005120439 | A1 | 20051222 | WO 2005-FR1049 | 20050428 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ,
LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA,
NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL,
SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,
ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
MR, NE, SN, TD, TG | | | | |
| PRIORITY APPLN INFO.: | | | FR 2004-5176 | A 20040513 |
| | | | FR 2004-7210 | A 20040630 |
| | | | US 2004-599021P | P 20040806 |

OTHER SOURCE(S): MARPAT 144:57628

AB Dental compns. are described which are photocurable by radiation with a wavelength greater than 390 nm. The compns. include a cationically active compd., a dental filler, optionally a dispersant, a cationic photoinitiator and a photosensitizer which is a thioxanthone salt substituted by at least one group contg. an ammonium function. The compn. has the advantage of remedying the color stability problems of finished dental products after crosslinking. For example, dental composites comprising photosensitizer based on thioxanthones contg. ammonium functionality, gave rise to an increased coloring

stability. An initial pink color change was obsd. with the comparative compn. comprising photosensitizer based on chloropropoxythioxanthone (CPTX), even at a low level of 60 ppm, which attenuates over time but which was still measurable after 5 days. In contrast, the use of thioxanthones contg. ammonium functionality, did not give rise to this coloration defect at a low level and, surprisingly, made it possible to preserve a greater color stability.

IT 76275-14-4, 9,10-Dibutoxyanthracene
 RL: CAT (Catalyst use); USES (Uses)
 (PS-39; photocurable dental compn. comprising thioxanthone photosensitizer with increased color stability)
 RN 76275-14-4 CAPLUS
 CN Anthracene, 9,10-dibutoxy- (9CI) (CA INDEX NAME)



L12 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2004:118389 CAPLUS
 DOCUMENT NUMBER: 140:147419
 TITLE: Positive-working photosensitive heat-resistant resin precursor compositions for semiconductor devices
 INVENTOR(S): Yumiba, Tomoyuki; Suwa, Atsushi; Tomikawa, Masao
 PATENT ASSIGNEE(S): Toray Industries, Inc., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

late and not OP

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|-------------------|----------|-----------------|----------|
| JP 2004045477 | A2 | 20040212 | JP 2002-199583 | 20020709 |
| PRIORITY APPLN. INFO.: | | | JP 2002-199583 | 20020709 |
| OTHER SOURCE(S): | MARPAT 140:147419 | | | |

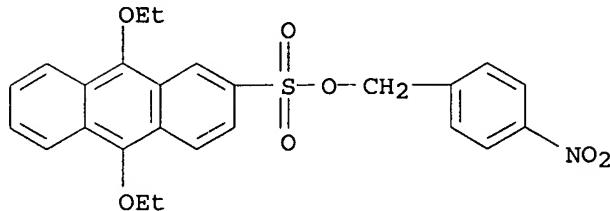
AB The compns. with improved adhesion to substrates after heat-curing for interlayer insulator films and surface protection films of semiconductor devices, contain (A) polymers having main units [COR1(OH)p(CO2R3)nCONHR2(OH)q(CO2R4)oNH]m (R1, R2 = 2-8 valent C.gtoreq.2 org. residue; R3, R4 = H, alkali metal ion, ammonium ion, C1-20 org. residue; m = 3-100,000; n, o = 0-2; p, q = 0-4; n + q > 0) and (B) compds. represented by R5R6C:N(CH2)a(SiR11R12O)bSiR13R14R15 or R7R8C:N(CH2)c(SiR16R17O)dSiR18R19(CH2)eN:CR9R10 (R5-R10 = C.gtoreq.1 org. residue; R11-R19 = C1-6 hydrocarbyl, C1-6 alkoxy; at least one of R11-R15 and one of R16-R19 = C1-6 alkoxy). Thus, a varnish contg. polyamic acid [prep'd. from 4,4'-diaminodiphenyl ether, 1,3-bis(3-aminopropyl)tetramethyldisiloxane, pyromellitic anhydride, and 3,3',4,4'-benzophenonetetracarboxylic acid dianhydride] and 3-triethoxysilyl-N-(1,3-dimethylbutylidene)propylamine was applied on a Si wafer and heated to give a polyimide film showing high adhesion after pressure cooker test.

IT 119666-27-2
 RL: CAT (Catalyst use); USES (Uses)
 (photoacid generator; pos.-working photosensitive heat-resistant resin

precursor compns. contg. aminoalkoxysilanes for semiconductor device insulator and protection films)

RN 119666-27-2 CAPLUS

CN 2-Anthracenesulfonic acid, 9,10-diethoxy-, (4-nitrophenyl)methyl ester (9CI) (CA INDEX NAME)



L12 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2004:118071 CAPLUS
 DOCUMENT NUMBER: 140:165070
 TITLE: Heat-resistant resin precursor compositions and semiconductor devices therewith
 INVENTOR(S): Yumiba, Tomoyuki; Minamihashi, Katsuya; Tomikawa, Masao
 PATENT ASSIGNEE(S): Toray Industries, Inc., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 26 pp.
 CODEN: JKXXAF

DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1

Late / Not ODP

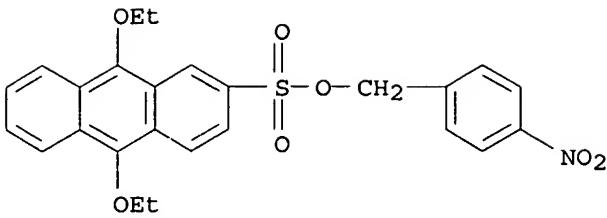
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|------------|
| JP 2004043779 | A2 | 20040212 | JP 2003-119531 | 20030424 |
| PRIORITY APPLN. INFO.: | | | JP 2002-126061 | A 20020426 |

AB Title compns. comprise (A) polymers having repeating units [COR1(OH)_p(COOR3)_nCONHR2(OH)_q(COOR4)_rNH]_m as main components and (B) compds. (Z1)aR5(Z2)b, wherein R1, R2 = divalent-octavalent org. groups contg. .gtoreq.2 carbon atoms; R3, R4 = H, alkali metal ion, ammonium ion, or C1-20 org. group; R5 = structure contg. .gtoreq.2 carbon atoms; m = 3-100,000 integer; n, o = 0-2 integer; p, q = 0-4 integer (p + q > 0); Z1 = .gtoreq.1 structure selected from NR6R7, N:CR8R9, NR10C(:O)R11, or NHCOR12OH; Z2 = .gtoreq.1 structure selected from NR6R7, N:CR8R9, NR10C(:O)R11, NHCOR12OH, vinyl, ethenyl, mercapto, or hydroxy group; R6, R7, R8, R9, R10 = H or C1-8 org. group; R11, R12 = C1-8 org. group; and a, b = .gtoreq.1 integer. Thus, 4,4'-diaminodiphenyl ether 19, 1,3-bis(3-aminopropyl)tetramethyldisiloxane 1,2, pyromellitic anhydride 10.8, and 3,3',4,4'-benzophenonetetracarboxylic dianhydride 15 g were reacted at room temp. for 6 h to give a polyamic acid varnish, 3% 3-aminopropionitrile was added therein, applied on a copper-sputtered silicon wafer, a titanium-sputtered silicon wafer, and a gold-sputtered silicon wafer, and cured to give test pieces showing good adhesion between metal materials and a heat-resistant resin.

IT 119666-27-2
 RL: CAT (Catalyst use); USES (Uses)
 (photoacid generator; prepn. of heat-resistant resin precursor compns. for semiconductor devices)

RN 119666-27-2 CAPLUS

CN 2-Anthracenesulfonic acid, 9,10-diethoxy-, (4-nitrophenyl)methyl ester (9CI) (CA INDEX NAME)



L12 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:271685 CAPLUS

DOCUMENT NUMBER: 138:287414

TITLE: Preparation of hydroquinone alkyl ethers

INVENTOR(S): Kubo, Hideo; Yamaguchi, Katsuji; Shirai, Akihiro

PATENT ASSIGNEE(S): Nippon Soda Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| JP 2003104926 | A2 | 20030409 | JP 2001-299629 | 20010928 |
| PRIORITY APPLN. INFO.: | | | JP 2001-299629 | 20010928 |

OTHER SOURCE(S): CASREACT 138:287414

AB Title compds., useful as sensitizers for photopolymn., etc. (no data), are prep'd. by alkylation of hydroquinones by C.gtoreq.3 alkylating agents in the presence of bases and quaternary ammonium salts having C.gtoreq.5 substituents on N. Anthraquinone was alkylated by BuI in THF/H2O in the presence of trioctylmethylammonium chloride, Na2S2O4, and NaOH at 40-50.degree. for 5 h to give 85% 9,10-dibutoxyanthracene.

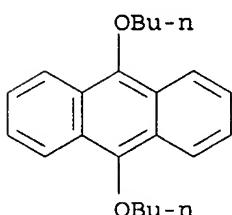
IT 76275-14-4P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(prepn. of hydroquinone alkyl ethers from hydroquinones using quaternary ammonium salts)

RN 76275-14-4 CAPLUS

CN Anthracene, 9,10-dibutoxy- (9CI) (CA INDEX NAME)



L12 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:271684 CAPLUS

DOCUMENT NUMBER: 138:287413

TITLE: Preparation of anthracene diethers

INVENTOR(S): Nakano, Hironori; Honda, Hiroyuki; Numata, Shigeaki

PATENT ASSIGNEE(S): Kawasaki Kasei Chemicals, Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

duplicate

Current app / duplicate

LANGUAGE: Japanese

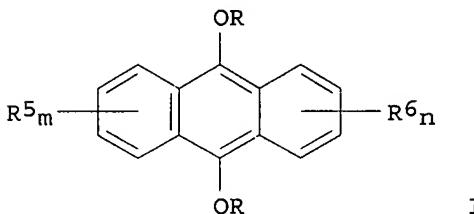
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|----------|-----------------|------------|
| JP 2003104925 | A2 | 20030409 | JP 2001-299128 | 20010928 |
| CA 2510270 | AA | 20040708 | CA 2002-2510270 | 20021219 |
| WO 2004056734 | A1 | 20040708 | WO 2002-JP13314 | 20021219 |
| WO 2004056734 | C1 | 20050804 | | |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| AU 2002357616 | A1 | 20040714 | AU 2002-357616 | 20021219 |
| EP 1574493 | A1 | 20050914 | EP 2002-808287 | 20021219 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK | | | | |
| US 2006079721 | A1 | 20060413 | US 2005-539807 | 20050620 |
| PRIORITY APPLN. INFO.: | | | JP 2001-299128 | A 20010928 |
| | | | WO 2002-JP13314 | W 20021219 |

OTHER SOURCE(S): MARPAT 138:287413

GI



AB Anthracene diethers I (R = alkyl, allyl, aryl, benzyl, hydroxyalkyl, alkoxyalkyl; R5, R6 = inert group; m, n = 0-4), useful as sensitizers for photocurable compns. (no data), are prep'd. by reaction of 9,10-anthracenediols with etherifying agents in aq. media contg. alkalies and quaternary ammonium or phosphonium compds.

9,10-Anthracenediol Na salt was etherified with BuBr in H2O/MEK in the presence of Bu4NBr at 70.degree. for 4 h to give 90% 9,10-dibutoxyanthracene.

IT 68818-86-0P, 9,10-Diethoxyanthracene 76275-14-4P

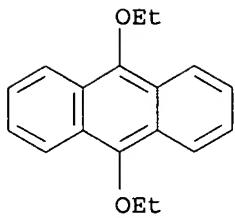
479412-73-2P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

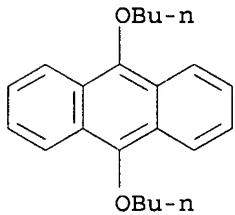
(prepn. of anthracene diethers from anthracenediols using quaternary ammonium or phosphonium compds.)

RN 68818-86-0 CAPLUS

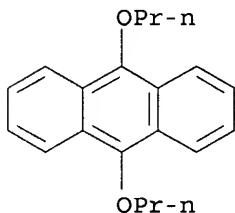
CN Anthracene, 9,10-diethoxy- (6CI, 9CI) (CA INDEX NAME)



RN 76275-14-4 CAPLUS
 CN Anthracene, 9,10-dibutoxy- (9CI) (CA INDEX NAME)



RN 479412-73-2 CAPLUS
 CN Anthracene, 9,10-dipropoxy- (9CI) (CA INDEX NAME)



L12 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:36602 CAPLUS

DOCUMENT NUMBER: 136:103469

TITLE: Heat-resistant resin compositions useful for semiconductor devices with good adhesion and low absorbance

INVENTOR(S): Okuda, Ryoji; Fujiwara, Takenori; Tomikawa, Masao

PATENT ASSIGNEE(S): Toray Industries, Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|------------|
| JP 2002012761 | A2 | 20020115 | JP 2001-112287 | 20010411 |
| PRIORITY APPLN. INFO.: | | | JP 2000-129395 | A 20000428 |

AB The compns. useful for surface protective and insulative uses for semiconductor devices contain triazine and/or vinyl group-contg. compds. and [COR1(OH)_p(CO₂R₃)_nCONHR₂(OH)_q(CO₂R₄)_mNH] _{[R1, R2 = (2-8 valent) org. group contg. > 2 C atoms; R3, R4 = H, alkali metal ion, ammonium ion, Cl-20 org. group; m = 3-100,000; n = 0-2; p, q = 0-4; n + q > 0]. Thus, cyanuric acid triallyl ester was mixed with a mixt.}

*Composition / not for process
marking*

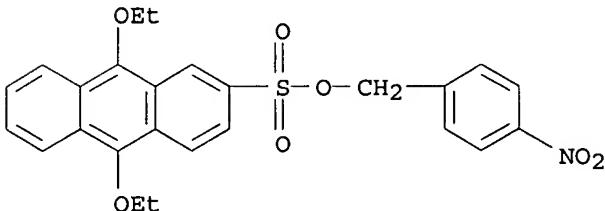
contg. 4,4'-diaminodiphenyl ether-pyromellitic anhydride-3,3',4,4'-benzophenonetetracarboxylic dianhydride copolymer, N,N-dimethylaminoethylmethacrylamide, N-phenylglycin, ethylene glycol dimethacrylate, and 3,3'-carbonylbis(7-diethylaminocoumalin), the resulting mixt. was applied on a glass substrate, dried, and cured to give a 1 .mu.m film showing absorbance 0.035 at 500 nm.

IT 119666-27-2

RL: MOA (Modifier or additive use); USES (Uses)
(photoacid generator; heat-resistant resin compns. useful for semiconductor devices with good adhesion and low absorbance)

RN 119666-27-2 CAPLUS

CN 2-Anthracesulfonic acid, 9,10-diethoxy-, (4-nitrophenyl)methyl ester
(9CI) (CA INDEX NAME)



L12 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:10872 CAPLUS

DOCUMENT NUMBER: 136:93561

TITLE: Optical imaging device with flat display panels equipped with electrodes partially coated with dielectric material of positive-working light-sensitive polyimide

INVENTOR(S): Okuda, Ryoji; Fujimori, Shigeo; Oka, Tetsuo; Tomikawa, Masao

PATENT ASSIGNEE(S): Toray Industries, Inc., Japan

SOURCE: PCT Int. Appl., 52 pp.

Not

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|------------------|------------|
| WO 2002001922 | A1 | 20020103 | WO 2001-JP5466 | 20010626 |
| W: KR, US
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
PT, SE, TR | | | | |
| JP 2002091343 | A2 | 20020327 | JP 2001-189396 | 20010622 |
| JP 2002116715 | A2 | 20020419 | JP 2001-189397 | 20010622 |
| TW 525407 | B | 20030321 | TW 2001-90115392 | 20010626 |
| EP 1296540 | A1 | 20030326 | EP 2001-941258 | 20010626 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, FI, CY, TR | | | | |
| US 2002162998 | A1 | 20021107 | US 2002-69769 | 20020228 |
| US 6696112 | B2 | 20040224 | | |
| PRIORITY APPLN. INFO.: | | | JP 2000-194019 | A 20000628 |
| | | | WO 2001-JP5466 | W 20010626 |

AB A display comprises a first electrode having an insulating layer in a manner such that a part of the first electrode is exposed, and a second electrode disposed so as to be opposed to the first electrode having the insulating layer, wherein the insulating layer comprises a pos. photosensitive polyimide with structural unit [-CO-R1(OH)p(COOR3)n-CO-NH-

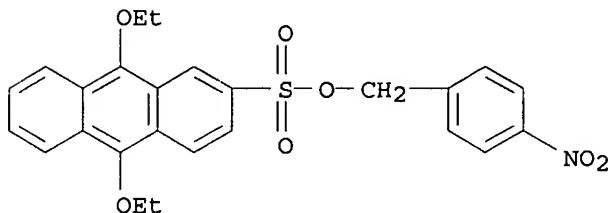
R₂(OH)_q(COOR₄)_o-NH-]m (R₁₋₂ = C_{gtoreq.2} 2-8 valent orgs.; R₃₋₄ = H, alkali metal ion, ammonium ion, Cl-20 orgs.; m = 3-100,000; n, o = 0-2 integer; p, q = 0-4 integer, p+q>0) and an agent generating an acid by a light. The optical imaging device has easily patterned polyimide insulating layer on the electrodes.

IT 119666-27-2

RL: RCT (Reactant); RACT (Reactant or reagent)
(photoresist compn. for dielec. coating on electrodes of optical imaging devices)

RN 119666-27-2 CAPLUS

CN 2-Anthracenesulfonic acid, 9,10-diethoxy-, (4-nitrophenyl)methyl ester (9CI) (CA INDEX NAME)



Not process for making

REFERENCE COUNT: .9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1990:581220 CAPLUS

DOCUMENT NUMBER: 113:181220

TITLE: An aqueous base developable novel deep-UV resist for krypton fluoride (KrF) excimer laser lithography

AUTHOR(S): Murata, Makoto; Takahashi, Toshihiko; Koshiba, Mitsunobu; Kawamura, Shinichi; Yamaoka, Tsuguo

CORPORATE SOURCE: Electron. Res. Lab., Japan Synth. Rubber Co., Ltd., Kawasaki, 215, Japan

SOURCE: Proceedings of SPIE-The International Society for Optical Engineering (1990), 1262(Adv. Resist Technol. Process. 7), 8-15

CODEN: PSISDG; ISSN: 0277-786X

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A novel deep-UV resist of poly(p-trimethylsilyloxy styrene) and p-nitrobenzyl 9,10-diethoxyanthracene-2-sulfonate is capable of resolving 0.3 .mu. lines and spaces with steep sidewalls at 0.8 .mu. thickness by a KrF excimer laser stepper. Wet development in a conventional tetramethylammonium hydroxide developer caused no crit. thickness loss in the unexposed area. Owing to its O plasma durability, this resist works as a top layer of a bilayer resist.

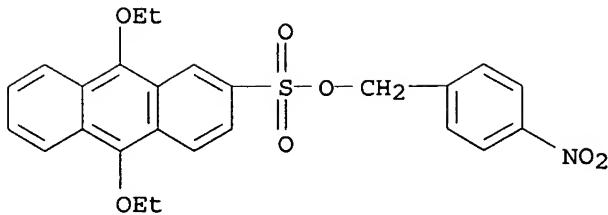
IT 119666-27-2

RL: USES (Uses)

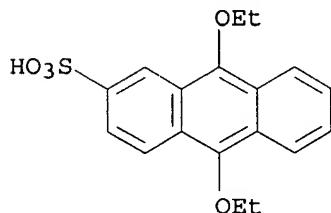
(excimer laser submicron lithog. deep-UV photoresist contg., aq. base developable)

RN 119666-27-2 CAPLUS

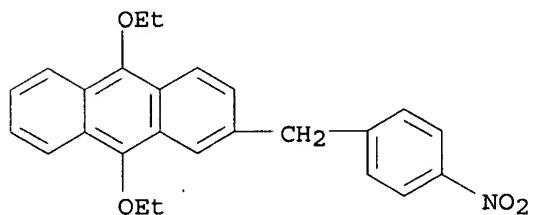
CN 2-Anthracenesulfonic acid, 9,10-diethoxy-, (4-nitrophenyl)methyl ester (9CI) (CA INDEX NAME)



IT 123131-61-3P, 9,10-Diethoxyanthracene-2-sulfonic acid
 RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (formation and reaction of, in deep-UV exposed submicron lithog.
 photoresist)
 RN 123131-61-3 CAPLUS
 CN 2-Anthracenesulfonic acid, 9,10-diethoxy- (9CI) (CA INDEX NAME)



IT 129995-19-3, 9,10-Diethoxy-2-p-nitrobenzylanthracene
 RL: USES (Uses)
 (in deep-UV exposed submicron lithog. photoresist)
 RN 129995-19-3 CAPLUS
 CN Anthracene, 9,10-diethoxy-2-[(4-nitrophenyl)methyl]- (9CI) (CA INDEX
 NAME)



*Liquid composition,
 but process for making*

L12 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1987:59428 CAPLUS
 DOCUMENT NUMBER: 106:59428
 TITLE: Liquid crystal compositions
 INVENTOR(S): Horimoto, Hikari; Mizutani, Yukio; Ogata, Takayuki
 PATENT ASSIGNEE(S): Tokuyama Soda Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------|------|----------|-----------------|----------|
| JP 61136584 | A2 | 19860624 | JP 1984-257349 | 19841207 |
| JP 03080833 | B4 | 19911226 | | |

PRIORITY APPLN. INFO.: JP 1984-257349 19841207
AB The claimed liq. crystal-like compns. contain (1) a quaternary ammonium compd. having .gtoreq.2 linear hydrophobic groups or .gtoreq.1 hydrophobic group contg. stiff part within the chain and (2) a phosphoric group-contg. compd. having .gtoreq.2 linear hydrophobic groups. The liq. crystal-like compns. give membranes which show good water resistance and liq. crystal characteristics. The compns. are useful in prep. synthetic biomembranes, display devices, and membranes for various sensors. Thus, a di(n-octadecyl)dimethylammonium bromide soln. and a di(n-dodecyl)monohydrogen phosphate soln. were mixed to give white ppt. which showed small soly. in water and showed liq. crystal phase at 56-115.

IT 106347-17-5

RL: PRP (Properties)
(prepns. of, as liq. crystal compds.)

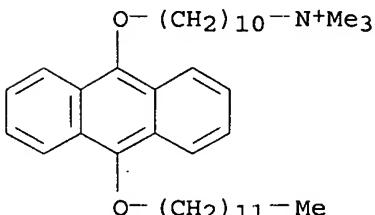
RN 106347-17-5 CAPLUS

CN 1-Decanaminium, 10-[10-(dodecyloxy)-9-anthracenyl]oxy]-N,N,N-trimethyl-, dioctadecyl phosphate (9CI) (CA INDEX NAME)

CM 1

CRN 106347-16-4

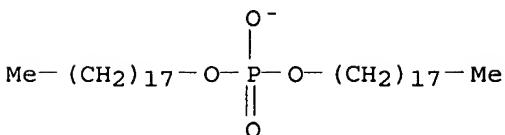
CMF C39 H62 N O2



CM 2

CRN 84841-00-9

CMF C36 H74 O4 P



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ENTER L#, L# RANGE, ALL, OR (END):yc10539807/a

YC10539807/A IS NOT A VALID L#, L# RANGE, OR ALL

Enter a valid L-number or L-number range for the items to be saved or ALL to SAVE all session queries as an L-number list. To see all L-numbers defined in this session, enter END. Then enter DISPLAY HISTORY at an arrow prompt (=>).

ENTER L#, L# RANGE, ALL, OR (END):14

ENTER NAME OR (END):yc10539807/a

ANSWER SET L4 HAS BEEN SAVED AS 'YC10539807/A'

HISTORY at an arrow prompt (=>).
ENTER L#, L# RANGE, ALL, OR (END):14
ENTER NAME OR (END):yc10539807/a
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1690902 PHASE
353345 PHASES
1839674 PHASE
(PHASE OR PHASES)
781065 TRANSFER
25566 TRANSFERS
793479 TRANSFER
(TRANSFER OR TRANSFERS)
793909 AGENT
1154928 AGENTS
1624410 AGENT
(AGENT OR AGENTS)
659 PHASE-TRANSFER AGENT
(PHASE(W) TRANSFER(W) AGENT)
L13 0 L4 AND PHASE-TRANSFER AGENT

=> s 14 and phase transfer
1690902 PHASE
353345 PHASES
1839674 PHASE
(PHASE OR PHASES)
781065 TRANSFER
25566 TRANSFERS
793479 TRANSFER
(TRANSFER OR TRANSFERS)
14182 PHASE TRANSFER
(PHASE(W) TRANSFER)
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L14 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:271685 CAPLUS Full-text
DOCUMENT NUMBER: 138:287414
TITLE: Preparation of hydroquinone alkyl ethers
INVENTOR(S): Kubo, Hideo; Yamaguchi, Katsuji; Shirai, Akihiro
PATENT ASSIGNEE(S): Nippon Soda Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| JP 2003104926 | A2 | 20030409 | JP 2001-299629 | 20010928 |
| PRIORITY APPLN. INFO.: | | | JP 2001-299629 | 20010928 |

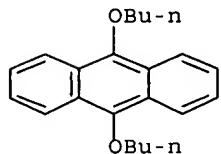
OTHER SOURCE(S): CASREACT 138:287414

AB Title compds., useful as sensitizers for photopolymn., etc. (no data), are prep'd. by alkylation of hydroquinones by C.gtoreq.3 alkylating agents in the presence of bases and quaternary ammonium salts having C.gtoreq.5 substituents on N. Anthraquinone was alkylated by BuI in THF/H2O in the presence of

trioctylmethylammonium chloride, Na₂S₂O₄, and NaOH at 40-50.degree. for 5 h to give 85% 9,10-dibutoxyanthracene.

IT 76275-14-4P
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of hydroquinone alkyl ethers from hydroquinones using quaternary ammonium salts)

RN 76275-14-4 CAPLUS
CN Anthracene, 9,10-dibutoxy- (9CI) (CA INDEX NAME)



=>

---Logging off of STN---

=>

Executing the logoff script...

=> LOG Y

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|--|------------------|---------------|
| FULL ESTIMATED COST | 139.15 | 306.74 |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE ENTRY | TOTAL SESSION |
| CA SUBSCRIBER PRICE | -13.50 | -13.50 |

STN INTERNATIONAL LOGOFF AT 08:43:10 ON 14 AUG 2006